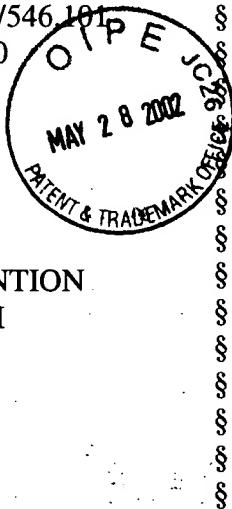


IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 09/546,101
Filed: April 10, 2000
Inventors:
Carney, et al.



Title: CARD RETENTION
MECHANISM

Examiner: T. Dinh
Group/Art Unit: 2841
Atty. Dkt. No: 5181-37301/EBM

CERTIFICATE OF MAILING
37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, Washington, DC 20231, on the date indicated below.

Jo Ann Scott
Printed Name
May 13, 2002
Signature Date

Commissioner for Patents
Washington, D.C. 20231

Sir:

Please amend the above-captioned application as follows:

In The Claims:

Below is a clean copy of the amended claims. A marked-up copy of the amended claims is attached at the end of the response.

1. (amended) A card retention system for a computer system, comprising:
a card having an endplate;
a carrier configured to mount within the computer system;
a retainer pivotally positionable in the carrier; and

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*B1
control*

a lock mechanism configured to inhibit rotation of the retainer to an open position when the retainer is in a closed position;
wherein at least one surface of the retainer couples to the endplate of the card when the retainer is in the closed position to inhibit movement of the card.

B2

3. (amended) The card retention system of claim 2, wherein the retainer further comprises a grip configured to facilitate retraction of the protrusion to allow the retainer to be rotated to the open position.

B3

12. A retention mechanism for retaining a card within a computer system, comprising:
a carrier configured to mount within the computer system, the carrier comprising a rotation inhibitor; and
a retainer pivotally coupled to the carrier, the retainer having at least one surface configured to engage the card when the retainer is in a closed position;
wherein a portion of the retainer contacts the rotation inhibitor when the retainer is in the closed position to inhibit rotation of the retainer to an open position.

B4

17. (amended) A method of retaining a card within a computer system, comprising:
gripping a grip of a retainer to retract a portion of the retainer;
rotating the retainer within a mount so that at least one surface of the retainer engages a portion of an endplate of the card;
releasing the grip to extend the portion of the retainer; and
inhibiting rotation of the retainer with a portion of the mount to keep the retainer in a closed position.

A. Pending Claims

Claims 1-4 and 7-23 are pending in the case. Claims 1, 3, 12 and 17 have been amended. Claim 3 has been amended to correct a typographical error.

B. Claims 22-23 Are Not Indefinite Pursuant To 35 U.S.C. § 112

The Examiner rejected claims 22-23 under 35 U.S.C § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant disagrees that the claim is indefinite.

Line 4-5 of claim 22 state: “the stop of the carrier is configured **to hold the retainer in an open position**” (emphasis added). Lines 6-7 of claim 22 state: “a lock mechanism configured **to inhibit rotation of the retainer to the open position when the retainer is in a closed position**” (emphasis added). Applicant believes that there is no indefiniteness associated with the “stop” and “locking mechanism” of claims 22 and 23, regardless of whether the “lock mechanism” and the “stop” are the same or different parts. Applicant is claiming a card retention system for a computer system that comprises both a “lock mechanism” and a “stop.”

To support the Examiner’s holding of indefiniteness, the Examiner stated that the following quote appears in the specification at page 8, lines 21-23: “a locking mechanism which is a rotation stop (62) or rotation inhibitor.” Applicant searched the referenced page, as well as the whole application, and the above noted quote does not appear in the application.

Page 8, lines 20-23 of the application, which refer to Figures 4 and 5, state:

The rotation inhibitor surfaces 58 may inhibit rotation of the retainer 20 from a closed position to an open position. The rotation inhibitor surfaces 58 of the carrier 22 and the protrusions 50 of the retainer 20 form a lock

mechanism that may inhibit rotation of the retainer from a closed position to an open position. The rotation stops 62 may inhibit rotation of the retainer from the open position.

Applicant believes that the above quoted section of the specification clearly distinguishes between the “stop” and “locking mechanism,” as indicated by their respective reference numerals, of the particular embodiment being described.

Applicant believes that claims 22 and 23 are consistent with the specification, and are not unclear. Applicant requests removal of the indefiniteness rejection of claims 22 and 23.

C. The Claims Are Not Obvious Over The Cited Art Pursuant To 35 U.S.C. § 103(a)

The Examiner rejected claims 1-4 and 7-23 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,215,668 to Hass et al. (hereinafter referred to as “Hass”) in view of U.S. Patent No. 5,601,349 to Holt (hereinafter referred to as “Holt”). To reject a claim as obvious, the Examiner has the burden of establishing a *prima facie* case of obviousness. *In re Warner et al.*, 379 F.2d 1011, 154 U.S.P.Q. 173, 177-178 (C.C.P.A. 1967). If a proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teaching of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959), MPEP 2143.01. Applicant disagrees that the claims are obvious in light of the cited art.

Hass teaches a device that secures an expansion card by wedging a wing of the device against a tab of the card. Specifically, Hass describes a flexible wing having a loading surface that engages a tab. (Hass, column 7, lines 1-4). Mechanical loading occurs due to wedging of the flexible wing onto the tab. (Hass, column 7, lines 35-37). The flexible wing is to be rotated until “optimum placement on tab 108 may be achieved.” (Hass, column 7, lines 42-44). Once engaged, the flexible wing is held in place by mechanical friction between the retaining unit and

the tab. (Hass, column 7, lines 38-39).

Combining the Hass patent with the chassis wall locking feature of Holt would change the principle of operation of the Hass device from a device in which rotation is continued until optimum loading condition is obtained at the engagement surface (simultaneously securing the card and causing the device to remain in place on the tab) to a device in which rotation is stopped by a feature remote from the engagement surface, regardless of whether the appropriate loading condition has been achieved. Applicant believes that the combination of Hass and Holt would change the principle of operation of Hass and/or Holt, and therefore, that the combination of Hass and Holt are not sufficient to establish a *prima facie* case of obviousness. Applicant requests removal of the obviousness rejection of the claims.

In addition to changing the principle of operation of Hass, there appears to be no reason to combine the Hass and Holt. The Examiner states:

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a locking mechanism as taught by Holt to modify the card retention system in order to engage or disengage a retainer when the retainer being inhibit rotation to lock/unlock a card in a system. Also, the locking mechanism uses to hold or release the retainer when a user being inserted or removed the card from the computer system.

Based on the above quoted section, Applicant cannot understand the reasons provided by the Examiner for combining the references. Applicant does not believe that the Examiner has provided valid reasons for combining Hass and Holt. The Hass device needs to be wedged against the card tab during use. Because the Hass device must be wedged against the card, the Hass device will stay in a closed position since a significant force would needed to undo the wedge fit of the device against the card tab. There appears to be no need to add a locking mechanism to maintain the retainer in a locked (closed) position. In addition, Hass appears to teach away from the use of a lock mechanism by having rotation stops 810 and 812 (see

accompanying discussion at column 98, lines 4-13). Applicant believes that the Examiner has not provided sufficient reason for combining Hass and Holt together.

At least because the combination of Hass and Holt would change the principle of operation of Hass, and because it appears that the Examiner has not provided a sufficient reason for combining Hass and Holt, Applicant requests removal of the obviousness rejection of claims 1-4 and 7-23.

The Examiner rejected claim 2 stating: "Hass discloses the card retention system wherein the lock mechanism comprises an engagement surface (804, column 7, line 55) on the carrier (814) and a protrusion (800; 808) extending from the retainer, wherein the protrusion interacts with the engagement surface to inhibit rotation of the retainer to the open position." Applicant respectfully disagrees with the Examiner's characterization of Hass. As clearly shown in Figure 6 of Hass, protrusion from retainer always allows for rotation of the retainer. The retainer (not the protrusion) pressing against the card tab and the expansion card chassis appear to inhibit rotation of the retainer. Claim 2 describes a combination of features including: "wherein the protrusion interacts with the engagement surface to inhibit rotation of the retainer to the open position." At least this feature, in combination with the other features of the claim, does not appear to be taught or suggested by the prior art. Applicant requests removal of the obviousness rejection of claim 2 and the claims dependent thereon.

The Examiner rejected claims 3 on grounds that Hass teaches a grip. Claim 3 describes a combination of features including: "a grip configured to facilitate retraction of the protrusion to allow the retainer to be rotated to the open position." Hass does not appear to teach or suggest retraction of a protrusion. Holt does not appear to teach or suggest a grip to facilitate retraction of a protrusion. Applicant does not believe that Hass or Holt, individually or in combination, teach or suggest at least the above quoted feature of claim 3 in combination with the other

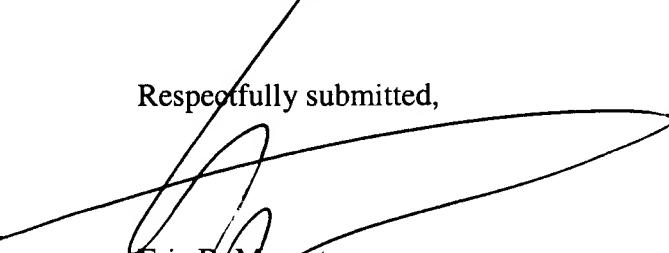
a stop "configured to hold the retainer in an open position." Hass and Holt, individually and in combination, do not appear to teach or suggest at least the above quoted feature of claim 22. Applicant requests removal of the obviousness rejection of claim 22 and the claims dependent thereon.

D. Summary

Applicant submits that the claims are in condition for allowance. Favorable reconsideration is respectfully requested.

Applicant believes that no fees are due in association with the filing of this response. If any extension of time is required, Applicant hereby requests the appropriate extension of time. If any fees are required or have been overpaid, please appropriately charge or credit those fees to Conley, Rose & Tayon, P.C. Deposit Account Number 50-1505/5181-37301/EBM.

Respectfully submitted,



Eric B. Meyertons
Reg. No. 34,876
Attorney for Applicant

CONLEY, ROSE & TAYON, P.C.
P.O. BOX 398
AUSTIN, TX 78767-0398
(512) 476-1400 (voice)
(512) 703-1250 (facsimile)

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